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| Application No.   | Applicant(s) |
|-------------------|--------------|
| 09/901,487        | KIM ET AL.   |
| Examiner          | Art Unit     |
| Michael S. Brooke | 2853         |

| × | Rejected |
|---|----------|
| = | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| N | Non-Elected  |
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| _ | Interference |

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| _                      |          | Claim Date                                       |                                                  | Claim             |                 | ım              | m Date    |                 |              |                        | ll       | Cla          | aim      | Date |       |          |          |                                          |                |          |          |        |           |
|------------------------|----------|--------------------------------------------------|--------------------------------------------------|-------------------|-----------------|-----------------|-----------|-----------------|--------------|------------------------|----------|--------------|----------|------|-------|----------|----------|------------------------------------------|----------------|----------|----------|--------|-----------|
| ' <del></del>          | -        |                                                  |                                                  |                   | $\Box$          |                 |           |                 | <del>-</del> |                        |          |              |          | 100  |       | <u></u>  |          | $  \                                   $ | T              | T        |          |        |           |
| , × 1                  | Original | 8/13/04                                          |                                                  |                   |                 |                 | 1.4       | Final           | Original     |                        |          |              |          |      | Final | Original |          |                                          | -              |          | - [      |        |           |
| Final                  | ij       | 113                                              |                                                  | 1 1               |                 |                 | - 3       | 這               | ij           |                        |          |              |          | 14   | ίĒ    | Ĕ,       |          |                                          | -              |          |          |        |           |
|                        | 0        | 2                                                |                                                  |                   | 1 1             |                 | Pa.       |                 | 0            |                        |          | 1 1          |          |      |       | 0        |          |                                          |                |          |          |        |           |
|                        | 1        | +                                                |                                                  | T                 |                 |                 | 4 ) "     |                 | 51           |                        | П        | T            |          | 4    |       | 101      |          |                                          |                |          |          |        |           |
|                        | 2        | +                                                |                                                  |                   | $\Box$          | $\neg \neg$     |           |                 | 52           |                        |          | $T_{-}I_{-}$ |          |      |       | 102      |          |                                          |                |          |          |        |           |
|                        | 3        | +                                                |                                                  |                   | $\neg \neg$     |                 |           |                 | 53           |                        |          |              |          | 1    |       | 103      |          | П                                        |                |          |          | Τ      |           |
|                        | 4        | +                                                |                                                  | $\Box$            |                 |                 | . 3       |                 | 54           | $\top$                 |          | T            |          |      |       | 104      |          |                                          |                |          |          |        |           |
|                        | 5        | +                                                |                                                  | 1 1               |                 |                 | - 1       |                 | 55           |                        |          |              | 1        |      |       | 105      |          |                                          |                |          |          | Τ      | П         |
|                        | 6        | +                                                |                                                  | $\Box$            | $\Box$          |                 |           | $\neg$          | 56           |                        |          |              |          | 1    |       | 106      |          |                                          |                |          |          |        |           |
|                        | 7        | +                                                |                                                  | $\sqcap$          |                 |                 |           |                 | 57           |                        |          |              |          |      |       | 107      |          |                                          |                |          |          |        | $\Box$    |
|                        | 8        | +                                                |                                                  | 1                 |                 | $\Box$          | Γ         |                 | 58           |                        |          |              |          |      |       | 108      |          | П                                        | П              |          |          |        |           |
|                        | 9        | +                                                |                                                  | 11                |                 |                 |           |                 | 59           |                        |          |              |          | . [  |       | 109      |          | П                                        | П              |          |          |        |           |
|                        | 10       | +                                                |                                                  |                   | $\neg \neg$     |                 |           | _               | 60           |                        |          |              |          | 1    |       | 110      |          | П                                        | Т              |          |          | Т      |           |
|                        | 11       | N                                                |                                                  | $\Box$            |                 |                 |           |                 | 61           |                        |          |              |          | 1    |       | 111      |          | П                                        | П              |          |          |        |           |
|                        | 12       | N                                                |                                                  | TT                | $\dashv \dashv$ | $\neg \neg$     | 1 5       |                 | 62           | -1-1-1-                | $\sqcap$ |              |          | -    |       | 112      |          |                                          | $\Box$         | $\top$   |          |        | $\Box$    |
|                        | 13       | N                                                |                                                  | ††                | 11              | $\neg \neg$     | . [       | $\neg \uparrow$ | 63           |                        |          | $\top$       |          | 1    | -     | 113      |          |                                          |                |          |          |        | П         |
|                        | 14       | N                                                |                                                  | $\top$            | $\dashv \dashv$ | $\neg \neg$     | ı         | T               | 64           |                        |          | $\top$       |          |      | Ė     | 114      |          |                                          |                |          |          |        | $\Box$    |
|                        | 15       | N                                                |                                                  | 1 1               |                 | $\top$          |           |                 | 65           |                        | 1"1      |              |          |      |       | 115      |          | П                                        | $\neg$         |          |          |        | П         |
|                        | 16       | Г                                                |                                                  | $\top$            |                 | $\dashv \dashv$ | 7.7       |                 | 66           |                        |          | 1 1          | 1        | 1    |       | 116      |          | П                                        | $\neg$         |          |          | Т      | $\Box$    |
|                        | 17       |                                                  |                                                  | +                 |                 |                 | 77.       |                 | 67           |                        |          |              |          |      |       | 117      |          | П                                        | $\neg$         | $\neg$   |          | Т      | $\sqcap$  |
|                        | 18       |                                                  |                                                  | $\top$            | $\dashv$        | $\top$          |           |                 | 68           |                        |          | 11           |          | 1 1  |       | 118      |          | П                                        | T              |          |          |        |           |
|                        | 19       | _                                                |                                                  | 1                 | $\dashv$        | -               | 14 fall - |                 | 69           |                        | 1 1      | 1 1          | 1        |      |       | 119      |          |                                          |                |          |          |        |           |
|                        | 20       | -                                                |                                                  | 1 1               | ++              | $\dashv$        | - 1       |                 | 70           |                        | +        | 1            | $\top$   |      |       | 120      |          |                                          |                | $\neg$   |          | 1      | 1         |
|                        | 21       | +                                                |                                                  | 1 1               | 11              | $\top$          | 7         |                 | 71           | _                      |          |              | 1        |      |       | 121      |          | П                                        | T              | $\neg$   | $\top$   | Т      | T         |
|                        | 22       | N                                                | -++                                              | $\dagger \dagger$ | -1-1            |                 |           |                 | 72           |                        |          |              |          | 27   |       | 122      |          | ΙT                                       |                |          | $\top$   | T      |           |
|                        | 23       | N                                                |                                                  | 1 1               | $\dashv \dashv$ |                 |           |                 | 73           |                        | 1 1      | 1 1          |          |      |       | 123      |          |                                          |                |          | 1        | 1      | $\top$    |
|                        | 24       | N                                                | -+                                               | $\dagger$         | ++              | $\neg$          | N/A       |                 | 74           | -1 1 1-                | $\top$   | 11           | $\top$   |      |       | 124      |          | Ħ                                        |                |          |          |        | 1         |
| $\vdash$               | 25       | N                                                |                                                  | +                 | $\dashv$        | $\neg$          | 30        |                 | 75           |                        | 1        | 11           |          |      |       | 125      |          | $\Box$                                   |                |          | 1        |        | 1         |
|                        | 26       | <u> </u>                                         | _       -                                        | ++                | ++              | $\top$          | -2        |                 | 76           | -1-1-1-                | +        | 11           | $\top$   | 9.   |       | 126      |          |                                          |                |          | 1        | 1      | $\top$    |
|                        | 27       | $\vdash$                                         |                                                  | 1 1               | -               | $\top$          |           |                 | 77           |                        |          |              | _        |      |       | 127      | $\top$   | $\Box$                                   | 寸              |          | 1        |        | 1         |
| -                      | 28       | $\vdash$                                         |                                                  | 1 1               | -               |                 |           |                 | 78           |                        | 1 1      |              |          |      |       | 128      | $\top$   |                                          | $\neg$         | T        |          |        |           |
|                        | 29       | ┢                                                |                                                  | +++               | 11              |                 |           |                 | 79           |                        |          |              | $\top$   |      |       | 129      |          |                                          | T              | T        |          | Τ      | $\top$    |
| $\vdash$               | 30       | H                                                | <del>-   -   -</del>                             | ++                | +               |                 |           |                 | 80           |                        | +        | 1-1-         | T        | 1    |       | 130      | $\dashv$ | 17                                       | 寸              | 十        |          | Τ      | $\top$    |
|                        | 31       | H                                                |                                                  | +-+               | -1-1            | +               | 0.0       |                 | 81           |                        | 1 1      | 1-1-         | $\top$   |      |       | 131      | $\neg$   | $\Box$                                   | ┪              | 十        | _        | $\top$ | $\top$    |
| $\vdash$               | 32       | $\vdash$                                         |                                                  | ++                | +               |                 |           |                 | 82           |                        | ++       | ++           | 1        | 1    |       | 132      |          | $\top$                                   | 寸              | $\neg$   | $\top$   | 1      | $\top$    |
| $\vdash$               | 33       | H                                                |                                                  | ++                | ++              | $\top$          |           |                 | 83           | _                      | 11       | ++           | +-       |      |       | 133      | $\neg$   | $\sqcap$                                 | 寸              | $\dashv$ | $\top$   | 1      | 1         |
| $\vdash$               | 34       | <del>                                     </del> | ++                                               | ++                | $\dashv$        | $\neg$          |           |                 | 84           | <del>- - -</del>       | 11       | ++           | $\top$   |      |       | 134      |          | $\Box$                                   | $\neg$         | $\neg$   | $\top$   | T      | $\top$    |
| $\vdash \vdash \vdash$ | 35       | <del>                                     </del> |                                                  | + +               | ++              | _               |           |                 | 85           |                        | 11       | 7            | $\top$   | 1    |       | 135      |          | 1 1                                      | $\dashv$       | $\top$   | $\top$   | 1      | $\top$    |
|                        | 36       | ╁                                                |                                                  | ++                |                 |                 |           |                 | 86           |                        | 11       | 11           | 1        | 1    |       | 136      |          | 1 1                                      | $\neg$         | $\dashv$ | $\neg$   | 十      | 1         |
| $\vdash$               | 37       | $\vdash$                                         | <del>                                     </del> | +-+               | $\dashv$        | $\dashv$        |           |                 | 87           | <del>-   -   -  </del> | ++       | ++           |          | ) .  |       | 137      |          | 1 1                                      | $\dashv$       | $\neg$   | $\top$   | $\top$ | 1         |
| Н                      | 38       | <del>                                     </del> |                                                  | ++                | ++              | $\neg$          |           |                 | 88           | <del>-     -</del>     | +        | ++           | $\dashv$ | y 3  |       | 138      | _        | $\Box$                                   | 寸              | $\top$   |          | $\top$ | T         |
| $\vdash$               | 39       | ╁╌                                               |                                                  | ++                | +               | $\neg$          |           |                 | 89           | <del>- - -</del>       | ++       | ++           | 1        |      |       | 139      | $\neg$   |                                          | $\neg \dagger$ | $\top$   | $\top$   | $\top$ | $\top$    |
| $\vdash$               | 40       | H                                                | <del>-     -</del>                               | ++                | -+-             | $\top$          |           |                 | 90           |                        | +        | ++           | $\neg$   |      |       | 140      | $\neg$   | T                                        |                | $\dashv$ | $\neg$   | 1      | $\top$    |
| $\vdash \vdash \vdash$ | 41       | H                                                |                                                  | + +               | ++              | $\top$          | 1         |                 | 91           | <del>-   -   -  </del> | +        | ++           | 1        | 1    |       | 141      |          | 1 1                                      | 1              | 寸        | 1        | 1      | T         |
| $\vdash \vdash$        | 42       | t –                                              |                                                  | +                 | $\dashv$        | $\neg$          |           |                 | 92           | <del>- - -</del>       | $\top$   | ++           | $\top$   | 1    |       | 142      | $\neg$   | $T^{T}$                                  | $\neg$         |          |          | 1      | T         |
| $\vdash$               | 43       | $\vdash$                                         | <del>                                     </del> | ++                | ++              | $\top$          | 1 1       | _               | 93           | -                      | 11       | +            |          | . %  |       | 143      | _        | T                                        | _              | $\top$   | 丁        | $\top$ | 1         |
| $\vdash$               | 44       | t –                                              | <del>   -  -</del>                               | ++                |                 | $\top$          | 1         |                 | 94           | <del>-     </del>      | 11       | 11           | $\top$   | 1    |       | 144      | $\top$   | 17                                       | $\neg$         | 丁        | $\top$   | 1      | T         |
| $\vdash$               | 45       | $\vdash$                                         | <del>                                     </del> | +                 | $\dashv$        | +               |           |                 | 95           |                        | ++       | +            | $\top$   | 1 ,  |       | 145      | $\dashv$ | $\dagger$                                | 一              | 十        | $\neg$   | $\top$ | $\top$    |
| $\vdash$               | 46       | $\vdash$                                         | <del>                                     </del> | +-+               | ++              | +               |           |                 | 96           | +++                    | ++       | ++           | +        | 1    |       | 146      | $\neg$   | 1 1                                      | $\dashv$       | $\dashv$ | $\dashv$ | +      | $\dagger$ |
| $\vdash$               | 47       | $\vdash$                                         |                                                  | +                 |                 | +-              | 34        |                 | 97           | <del></del>            | ++       | ++           | $\top$   | 1    |       | 147      |          | +                                        |                | _        | $\neg$   | $\top$ | $\top$    |
| $\vdash \vdash$        | 48       | ┼-                                               | <del>     </del>                                 | +                 | $\dashv$        | $\dashv$        |           |                 | 98           | <del></del>            | ++       | ++           | $\top$   |      |       | 148      | $\dashv$ | $\dagger$                                | _              | _        | $\neg$   | $\top$ | †         |
| $\vdash$               | 49       | -                                                | <del>                                     </del> | ++                | +               |                 |           |                 | 99           |                        | ++       | ++           | $\top$   | 1:5  |       | 149      | $\top$   | $\dagger \dagger$                        | _              | $\dashv$ |          | 十      | †         |
| $\vdash$               | 50       | ╁                                                | <del>                                     </del> | ++                | $\dashv$        |                 |           |                 | 100          | +++                    | ++       | ++           | $\top$   | 1    |       | 150      | $\neg$   | 1-1                                      | 一              | $\dashv$ | $\dashv$ | $\top$ | 1         |